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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,938	07/07/2006	Fabrizio Donazzi	09875.0360	8289

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EXAMINER
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NGUYEN, CHAUN

ART UNIT	PAPER NUMBER
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2831

MAIL DATE	DELIVERY MODE
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03/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,938	<b>Applicant(s)</b> DONAZZI ET AL.	
	<b>Examiner</b> Chau N. Nguyen	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 43-84 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-51, 54-71, 73, 74, 76-82 and 84 is/are rejected.
- 7) ☒ Claim(s) 52, 53, 72, 75 and 83 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/26/07&amp;11/27/06</u> .                                    | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of "the flanges extend inwardly from the end portions of the side walls of the base" as claimed in claim 52, "a material having a permeability greater than air is interposed at the superimpose sides of the base and of the cover" as claimed in claim 59, and "the base and cover comprises walls having a rolling direction substantially perpendicular to the axis of the at least one cable" as claimed in claim 60 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures

must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 53 and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 53, line 1, change "47" to --50--.

Claim 70 contains the trademark/trade name "Permalloy" and "Supermalloy". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply

with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 43, 46-49, 54-56, 73, 74, 76, 77, 79, 80, and 84 are rejected under 35 U.S.C. 102(b) as being anticipated by Onizuka (6,268,787).

Onizuka (Figure 1) discloses an electrical power transmission line comprising: at least one electrical cable; at least one shielding element made of at least one ferromagnetic material arranged in a radially outer position with respect to said at least one cable for shielding the magnetic field generated by said cable, said at least one shielding element comprising a base (2) and a cover (1); and at

least one supporting element (21) coupled to at least said base of the shielding element (re claim 43). Onizuka also discloses that the base and the cover are substantially continuous (re claim 46), said base comprises a bottom wall and a pair of side walls (re claim 47), said bottom wall and said pair of side walls are substantially flat (re claim 48), said side walls extend in a direction substantially perpendicular to said bottom wall (re claim 49), said cover is substantially continuous (re claim 54), said cover comprises a main wall and a pair of flanges extending from the main wall in a predetermined direction (re claim 55), said flanges extend in a direction substantially perpendicular to said main wall (re claim 56), a supporting element (22) coupled to said cover of the shielding element (re claim 73), said at least one supporting element is arranged in a radially outer position with respect to said at least one shielding element (re claim 74), said at least one shielding element is interposed between a pair of supporting elements (re claim 76), said at least one supporting element is substantially flat (re claim 77), said at least one supporting element is made of an electrically non-conductive and non-ferromagnetic material (re claim 79) which is plastic (re claim 80). Claim 84 is a method counterpart of claim 43.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth et al. (DE 2710620) in view of Onizuka.

Siewerth et al. (Figure 3) discloses an electrical power transmission line comprising at least one cable, at least one shielding element made of at least one ferromagnetic material arranged in a radially outer position with respect to the

cable for shielding the magnetic field generated by the cable, the at least one shielding element comprising a base and a cover. Siewerth et al. also discloses the at least one cable comprising three cables arranged in a trefoil arrangement (re claim 44) and the line being placed underground (re claim 45). Siewerth et al. does not disclose at least one supporting element coupled to at least the base of the shielding element (re claim 43). Onizuka discloses a shielding element comprising a base and a cover, wherein at least one supporting element is coupled to the base of the shielding element. It would have been obvious to one skilled in the art to provide the supporting element as taught by Onizuka to at least the base of the Siewerth et al. shielding element to protect the shielding base from the environment.

9. Claims 57, 68, 69, 78 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onizuka.

Onizuka discloses the invention substantially as claimed except for the base and the cover comprising walls having a thickness of about 0.20 mm to about 0.35mm, the ferromagnetic material having a maximum value of relative magnetic permeability between about 20000 and about 60000, the supporting element comprising a respective wall having a thickness of about 1 to about 20 mm, and the



plastic material being polyethylene. Although not specifically disclosed by Onizuka, it would have been obvious to one skilled in the art to modify the line of Onizuka by choosing suitable thicknesses for the walls of the base, the cover, and the supporting element and choosing material having suitable permeability to meet the specific use of the resulting line since it has been held that where the general conditions of a claim are disclosed by the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would also have been obvious to one skilled in the art to use polyethylene for the supporting element of Onizuka since polyethylene is a well-known plastic for being used in the cable art.

10. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onizuka in view of Garwin et al. (3,222,449).

Onizuka discloses the invention substantially as claimed except for the base and the cover comprising respective sides superimposed for a portion of predetermined length in lateral direction. Garwin et al. discloses a magnetic shield arrangement comprising a base (25) and a cover (26) comprising respective sides superimposed for a portion of predetermined length in lateral direction. It would have been obvious to one skilled in the art to modify the shielding element of

Onizuka such that the base and the cover comprise respective sides superimposed for a portion of predetermined length in lateral direction as taught by Garwin et al. to improve the shielding around the cable.

11. Claims 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onizuka in view of Sefko et al. (4,447,795).

Claims 70 and 71 additionally recite the ferromagnetic material being grain oriented silicon steel, wherein the silicon content is about 1% to about 5%. Sefko et al. discloses web magnetic cores. Sefko et al. discloses that grain oriented silicon steel with the silicon content about 1% to about 5% is one of many known ferromagnetic materials. It would have been obvious to one skilled in the art to use the ferromagnetic material as taught by Sefko et al. for the ferromagnetic material of Onizuka to provide suitable permeability for the shielding element.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the

reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 43-45, 47, 50, 51, 58-67, and 82 are provisionally rejected on the

ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 29, 30, 36, 38, 40-42, 44 and 51 of copending Application No.

10/530,520 in view of Okada et al. (5,709,249). Said claims in the copending application ('520) disclose the invention substantially as claimed except for at least one supporting element coupled to at least the base of the shielding element.

Okada et al. discloses a supporting element (1) for transmission line. It would have been obvious to one skilled in the art use the supporting element as taught by Okada et al. to support at least the base of the copending application shielding element to protect the base from the environment.

This is a provisional obviousness-type double patenting rejection.

***Allowable Subject Matter***

14. Claims 52, 53, 72, 75, and 83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutiérrez can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chau N Nguyen/

Chau N Nguyen  
Primary Examiner  
Art Unit 2831